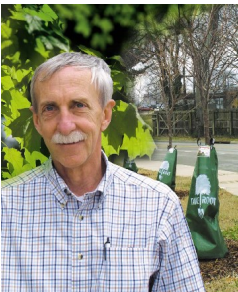


# 2017 State of the Trees Report

Department of Public Works  
Division of Urban Forestry

## 2017 – A Forester's Perspective

Each year is marked by different happenings and events and 2017 did not disappoint. The spring and summer were loaded with storms beginning in March and lasting well into the summer. Much of the year was spent removing dead and storm damaged trees. Last year's intense heat and severe drought did result in an increase in tree mortality and I expect the after-effects to continue for at least another year. New personnel were hired to fill vacancies in all three of our operational areas: Forestry, Emergency and the Central Business District Crew. They needed to be trained for their primary duties and responsibilities and also cross-trained in order to fill in other operational slots as needed. We needed to find CDL drivers who



*Gene Hyde is editor of this publication.*

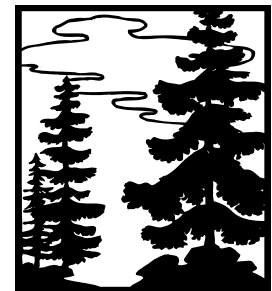
could fit into our system and this was quite a challenge. However, we persevered and hired some very fine individuals who have really excelled in their new positions. Another need was met when we made an outright purchase of a new 75-foot bucket truck specifically set up for forestry operations. This unit replaces an older 55 foot bucket truck which was purchased 22 years earlier. The extra 20 feet of working height will allow crews to perform essential work that was not previously possible with the older unit. Our new crew supervisor in the Forestry operations has pushed hard to prune thousands of trees in the downtown area as well as trees which line the gateways into downtown. The Tree Commission held its second Annual Earth Day event in Coolidge Park in April and was enjoyed by many people. Finally, the Tree Commission has accepted several new trees onto the Notable Tree Register and is always looking for new nominees.

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### Inside this report:

<i>Tree Planting</i>	2
<i>Pre-submittal meetings</i>	2
<i>Status of Service Requests</i>	2
<i>The South Broad Street Gateway</i>	3
<i>Affects of the Drought of 2016 Linger</i>	3
<i>Staff Happenings</i>	4



## Arbor Day at Riverview Park

In March of 2015 the Riverview Garden Club approached the Tree Commission regarding their new initiative to plant 100 trees along streets in the Riverview neighborhood before 2022. The goal is to preserve a healthy and vibrant tree canopy by using native species.

They requested support for this effort and the Tree Commission responded positively by agreeing to provide assistance to help launch the initiative. The Riverview Garden Club purchased 16 gorgeous Overcup Oaks and the Urban Forestry section provided an additional 30 trees including more Overcup Oaks as well as Sugar Maples, Tulip poplars, and Swamp White Oaks.

The first trees for this effort were planted on Arbor Day, March 3rd in Riverview Park. During the ceremony the City of Chattanooga was recertified as a Tree City community for the 27th consecutive year. On Saturday, March 4th, neighborhood residents of all ages along with the Volkswagen Volunteers enjoyed a beautiful sunny day as the group planted and mulched the remaining 28 trees.



*Planting oaks in Riverview Park. March, 2017*

### Special Points of interest in 2016:

- Chattanooga was a 'Tree City' for the 27th year.
- Arbor Day was held at Riverview Park.
- The backlog of Service Requests awaiting inspection is zero!

## Tree Planting in 2017

A total of 205 trees representing 24 species and varieties were planted by in-house and contract crews in 2017 as street trees. They are:

1. Overcup Oak	24 ea.
2. Yoshino Cherry	40 ea.
3. Redbud	19 ea.
4. 'Princeton' American Elm	12 ea.
5. 'Allee' Elm	3 ea.
6. Trident Maple	8 ea.
7. 'Autumn Gold' Ginkgo	4 ea.
8. Tulip Poplar	24 ea.
9. Other Miscellaneous Oaks	5 ea.
10. Yellowwood	7 ea.
11. Dynamite Crapemyrtle	2 ea.
12. Pin Oak	14 ea.

13. Goldenrain Tree	3 ea.
14. 'Prairiefire' Crabapple	12 ea.
15. Chinese Pistache	8 ea.
16. 'Fall Fiesta' Sugar Maple	5 ea.
17. Willow Oak	10 ea.
18. Autumn Blaze Maple, Blackgum, Hapidaze Sweetgum, Sweetbay Magnolia, Hawthorne	1 ea.

An additional 80 small containerized redbuds were purchased for the Blue Trees project at a cost of \$1,409. These trees were planted in the East Lake, Highland Park, and Ridgedale neighborhoods.

### SUMMARY

Total Trees Planted: 288 at a cost of \$31,715

Cost of Shipping: \$2,500

Cost of contracted planting of 154 trees: \$14,465

## Pre-submittal Meetings

During his term as mayor, Jon Kinsey (1997-2001) established the "One Stop Shop" in a new building called the Development Resource Center (DRC). Built specifically to aid the development community by making it quicker and easier to obtain all of the necessary permits in one location, the DRC serves as a hub for building inspectors, engineers, the Regional Planning Agency, and transportation planners. An outgrowth of this process was the establishment of the Pre-submittal meeting. The meetings are held on Tuesday and Thursday mornings and provide developers, engineers, and architects the opportunity to sit around the table with representatives from all City departments responsible for issuing permits. Such a meeting is extremely useful since it saves time and provides an applicant with all of the information needed to successfully prepare and submit permit requests with minimal hassles and delays. As a result of increased development in the downtown, Northshore, and other areas where there are an abundance of street trees; it was obvious

to City Forester Gene Hyde that someone needed to take an active role in the plans review process to ensure that new tree plantings on city-owned lands are appropriate for the site and are provided a one year replacement warranty. A second goal is to see that existing City trees are factored into the development plans for special protection and care. By City Code the City Forester has the authority to issue tree ordinance permits which requires specific details on standards to follow for tree plantings and removals, as well as tree protection for existing trees. According to Hyde, "My attendance at the pre-submittal meetings has provided better oversight into the process for all of those in the building community who work around City-owned trees." Mr. Hyde issued over 80 Tree Ordinance permits in 2017 which is far and away more than ever in a single year. "Although I have only been attending these meetings regularly since November, 2016, I can already see a difference" said Hyde.



## Status of Service Requests

Responding to service requests is the single most time consuming and expensive aspect of our urban forestry operations. These requests pour in from the general public as well as from various departments within the city. In 2017 the 311 Call center records indicate that we received 1,214 requests and that all of them have been inspected and closed. One measure of operational efficiency is how quickly we are able to inspect a request and either create a work order or deny service. Each category of request has a time deadline for inspection and the clock begins to tick as soon as the Service Request is received. Shown below are the number of requests

received by category in 2017, the allotted time for inspection, and the percentage of requests inspected and closed on-time. These stats do not include the time it takes to actually perform the on-site service. Those figures are not available.

General Tree Problems	171	5 days	40% on-time
Fallen Trees and Branches	543	5 days	67% on-time
Tree Removal/Hazard	161	35 days	77% on-time
Tree Trimming	339	25 days	91% on-time
Totals	1,214		

## The South Broad Street Gateway

In the mid 1990's approximately 88 'Patmore' Green Ash trees were planted in tree wells lining south Broad Street from 12th Street to the foot of Lookout Mountain. Unfortunately, those trees proved to be a bad choice and were replaced several years later with red-blooming 'Tuskegee' Crapemyrtles. Since then there have been several waves of additional plantings and replacements and there is now a total of 350 trees representing nine species and varieties. These include several species of oaks, Chinese Pistache, Japanese Zelkova, Crapemyrtle, Crabapple, Green Ash, and Pin, Shumard, and English Oaks. Until 2015 there has been little change along this corridor in terms of either the street trees or the surrounding land use. However, in the past few years there has been something of a renaissance on Broad Street with new businesses, shops, and housing units popping up. This trend is projected to continue well into the future. Development pressure often translates to requests for the removal and/or replacement of street trees. Typically new businesses want visibility for their store fronts and billboard companies want visibility for their advertisements. Some

new property owners just don't want the trees for a variety of reasons. Local residents and business owners simply want the corridor to become a destination rather than a long connector between Lookout Mountain and downtown. Many of the existing trees have lived their useful life and need to be replaced. Others are large canopied trees that were planted underneath energized lines and



*Broad Street: trees, billboards, and energized lines compete for space.*

were topped by the Electric Power Board and are quite unattractive and should be replaced. In 2017 City Forester Gene Hyde has made an attempt to get all of the stakeholders together to craft a new vision for this corridor. But as the saying goes, "It's complicated!" Working with the Urban Design Studio, Hyde intends to push hard in 2018 to pull stakeholders together for meaningful discussions and to find funds to develop a workable plan.

## Effects from the Drought of 2016 Linger

The year 2016 was one of the driest on record and set the stage for tree problems in 2017. Chattanooga received just 14 inches of rain from March through October — less than half of the 32.83 inches the city typically averages over that eight-month span. The end total of 35.58 inches of precipitation for the year came up 17 inches short of the City's annual average but was enough to avoid breaking the 1904 record low of 32.68 inches. Droughts can have a long term impact on City trees. According to an article by Robert Childs in the on-line version of Fine Gardening, Issue 87, "One common long-term effect of drought is stem dieback, which is a result of the loss of fine feeder roots. As soils become dry during the hottest summer months, the fine roots in the upper soil surface may be stimulated to increase in number to get what little water is available. However, they will begin to die if soils remain dry, thus putting the root system out of balance with the amount of foliage found aboveground. When rain does return, the plant may not be able to take full advantage of this much-needed water because of its reduced root mass. The result is a resizing of the canopy through branch die-back. If drought persists into the next growing season or recurs before the tree can fully recover, it may die. Pest problems are another result of long-term

drought. Many pests, like wood borers and bark beetles, cannot survive in a healthy tree. As a tree or shrub becomes weakened from drought, these pests invade rapidly. Some pests, like spider mites, lacebugs, and aphids, can also be more detrimental to their hosts during extended hot and dry periods. The increased injury is a result of the plant's inability to grow faster than the rate of damage, due to the lack of water. Also, many beneficial insects, such as predatory mites, slow or cease foraging activity under these conditions. Drought-stressed trees also exhibit a reduced ability to compartmentalize or isolate small wounds, which allows pathogens to invade and colonize successfully. It is common to see more incidences of stem canker diseases in the years following a drought."

City Forester, Gene Hyde, recalled that in the summer of 2017 there were many reports of trees with drought-like symptoms even though abundant rainfall was received in the first half of the year. Hyde also noted that there were other calls throughout the year of atypical problems such as trees dropping perfectly green leaves in mid-summer for no apparent reason. Hyde believes that we will see at least one more year of drought related symptoms and mortality before stressed trees either die or recover and return to good health.

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#### Chattanooga Tree Commission Members:

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B.J. Absher  
Bruce Blohm  
Glen Craig  
Dr. Hill Craddock, Vice Chair  
Lisa Lemza  
Mariah Prescott  
Craig Walker  
Sally Wencel

#### Administrator of Public Works:

Justin Holland

#### Deputy Administrator of Public Works:

Donald Stone

#### Director of City-Wide Services:

Rick Colston, Jr.

The Urban Forestry program functions as a separate operation within City Wide Services. Its mission is to provide the City with a safe and attractive urban forest, and to educate citizens about the benefits and proper care of trees. It is guided by the nine-member Tree Advisory Commission as appointed by the Mayor. The Forestry Division draws on other elements within both Public Works and Parks and Recreation to assist with tree planting, solving service requests, and other missions. The program's main operating budget for FY '16-'17 of \$851,232 is derived strictly from annual appropriations.

This report is prepared annually at the request of the Tree Advisory Commission.

## Forestry and Emergency Staff

In 2008, the Urban Forestry operations were expanded to include the Emergency Department and in 2014 the Central Business District Crew was created.

Listed below are the current employees in their assigned sections:

#### Urban Forestry:

Tree Trimmers: Wayne Pinkerton, David O'Rear, and Dwight Sweatt

Equipment Operator 4: Bruce Johnson, Dexter Joshen, and Ross Petty

Crew Supervisor 2: Mike Richie, Milton Stewart, and Tommy Harris

#### Emergency:

The Emergency Department has the responsibility for the removal of chemical spills along roadways as well as dead animal pick-ups, litter pick-up, and discarded tires. They also are on-call at night for fallen trees, pothole repair, and other mishaps that present a hazard to travelers along City streets. There is always an around-the-clock Emergency Department worker on duty every day of the year!

#### Workers include:

Equipment Operator 1: Alvin Thomas and Warren Tillison  
Equipment Operator 3: Unfilled  
Equipment Operator 4: Sherman Sales, David Lanford, Rich Jeckel, Buddy Brown, Carl Ramsey, Steve Harrelson, and Clarence Shepherd

#### The Central Business District:

These crew workers are responsible for the cleanup of leaves, litter and making the downtown area clean and attractive.

#### Workers include:

Crew Worker 1: Kendrick Heathington, Robert Eppinger, Rodney Jackson  
Equipment Operator 3: Van Johnson  
Crew Supervisor 2: Terry McCullough

